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|-----------------------------------------|------------------------|-------------------------------------------------------------------------------------|
| <b>0037100</b>                          | <b>DATA SHEET</b>      |  |
| <b>valid from:</b><br><b>01.01.2019</b> | <b>UNITRONIC® LiHH</b> |                                                                                     |

## Application

UNITRONIC® LiHH is a halogen free cable for low frequency applications. The cable is designed for fixed installation and for conditional flexible use. It is used in dry and damp interiors but not appropriate for outside usage.  
The cable is used for data processing, measurement and control engineering, safety related systems and as electronic cables.

## Design

|                          |                                                                         |
|--------------------------|-------------------------------------------------------------------------|
| Design                   | Design based on standard VDE 0812                                       |
| Conductor                | fine wire strands of bare copper wires                                  |
| Insulation               | special Polyolefin-based compound                                       |
| Core identification code | according to DIN 47100                                                  |
| Stranding                | cores are stranded in layers                                            |
| Outer sheath             | special halogen-free compound<br>colour: pebble grey (similar RAL 7032) |

## Electrical properties at 20°C

|                             |                                      |
|-----------------------------|--------------------------------------|
| Specific volume resistivity | > 20 G $\Omega$ x cm                 |
| Mutual capacitance          | C/C: approx. 80 nF/km<br>(at 800 Hz) |
| Inductance                  | approx. 0.65 mH/km                   |
| Peak operating voltage      | 250 V (not for power applications)   |
| Test voltage                | 1200 V                               |

## Mechanical and thermal properties

|                        |                                                                                                                         |
|------------------------|-------------------------------------------------------------------------------------------------------------------------|
| Minimum bending radius | Flexing: 10 x cable $\emptyset$<br>Fixed installation: 4 x cable $\emptyset$                                            |
| Temperature range      | Flexing: - 5 °C up to +70 °C<br>Fixed installation: - 40 °C up to +80 °C                                                |
| Flammability           | flame retardant acc. to IEC 60332-1-2                                                                                   |
| Halogen free           | according to IEC 60754-1                                                                                                |
| Corrosivity of gases   | according to IEC 60754-2                                                                                                |
| Smoke density          | according to IEC 61034-2                                                                                                |
| Toxicity               | according to DIN EN 50305                                                                                               |
| General requirements   | This cable is conform to the EU-Directive 2011/65/EU<br>(RoHS, Restriction of the use of certain hazardous substances). |

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| Creator: PESA / PDC  | Document: DB0037100EN | Page 1 of 1 |
| Released: ALTE / PDC | Version: 05           |             |